



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
	09/680,604	10/06/2000	Dan Matheson	COCR.01USU1	9577
	75	90 02/11/2005		EXAM	INER
	Cochran & Collins LLP Suite 230			CABRERA, ZOILA E	
	3555 Stanford R	load		ART UNIT	PAPER NUMBER
Fort Collins, CO 80525			2125		

DATE MAILED: 02/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
Office Action Commence	09/680,604	MATHESON, DAN			
Office Action Summary	Examiner	Art Unit			
	Zoila E. Cabrera	2125			
The MAILING DATE of this communicate Period for Reply	ntion appears on the cover sheet wit	h the correspondence address			
A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNIC.  - Extensions of time may be available under the provisions of after SIX (6) MONTHS from the mailing date of this communi.  - If the period for reply specified above is less than thirty (30) of the period for reply is specified above, the maximum statut.  - Failure to reply within the set or extended period for reply will Any reply received by the Office later than three months after earned patent term adjustment. See 37 CFR 1.704(b).	ATION.  37 CFR 1.136(a). In no event, however, may a re cation.  lays, a reply within the statutory minimum of thirty ory period will apply and will expire SIX (6) MONT I, by statute, cause the application to become ABA	ply be timely filed  r (30) days will be considered timely.  THS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed	on <i>12 July 2004</i> .				
·	☐ This action is non-final.				
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims					
4a) Of the above claim(s) is/are 5) ☐ Claim(s) is/are allowed. 6) ☑ Claim(s) <u>1-6,8-13 and 15-19</u> is/are rejected to.	Claim(s) 1-6,8-13 and 15-19 is/are rejected.  Claim(s) is/are objected to.				
Application Papers					
9) The specification is objected to by the E	☐ The specification is objected to by the Examiner.				
10)☐ The drawing(s) filed on is/are: a	[0] The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
_	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for a) All b) Some * c) None of:  1. Certified copies of the priority do 2. Certified copies of the priority do 3. Copies of the certified copies of application from the Internationa * See the attached detailed Office action f	cuments have been received. cuments have been received in Ap the priority documents have been r I Bureau (PCT Rule 17.2(a)).	oplication No received in this National Stage			
	or a list of the certified copies flot i	eceivea.			
Attachment(s)	م المناعدة الم	(DTO 412)			
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO</li> </ol>		ummary (PTO-413) /Mail Date			
<ol> <li>Information Disclosure Statement(s) (PTO-1449 or PT Paper No(s)/Mail Date</li> </ol>		formal Patent Application (PTO-152)			

Art Unit: 2125

#### **DETAILED ACTION**

Page 2

#### Response to Arguments

1. Applicant's arguments with respect to claims 1-6, 8-13, 15-19 have been considered but are most in view of the new ground(s) of rejection.

### Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-6 and 8-13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The steps of claims 1-6 and 8-13 consist solely of mathematical operations without practical application in the technological arts or simply manipulates abstract ideas without practical application in the technological arts. Please note that the language of claims 1 and 8 is directed merely to an abstract idea that is not tied to a technological art, environment, or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. Merely describing software or a program without any tangible structure is too preliminary to permit one of ordinary skill to realize any usefulness in the technological arts.

To expedite a complete examination of the instant application claims 1-6, 8-13 rejected under 35 U.S.C. 101 (non-statutory) above are further rejected as set forth

below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 8 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Sebastian et al. (US 5,822,206).

Claims 1, 8 and 15 are so broad as to read in Sebastian et al. who discloses an object model for capturing decision-related data to a product design (Col. 5, lines 44-47) comprising:

a question interface for capturing a question in a question object that encapsulates text-based information related to a design issue associated with said product design (Col. 6, lines 25-30 and lines 35-37; Col. 16, lines 41-45, i.e., queries); an answer interface for capturing an answer in an answer object that encapsulates text-based information addressing information encapsulated in a selected question object and that is linked to said selected question object (Col. 5, lines 59-24; Col. 15, lines 34-36; the material selector module can provide its

output, *or answer*, in the template notation of the present invention); and a decision interface for capturing a decision in a decision object that encapsulates text-based information defining a product requirement in response to information in said selected question object and that is linked to said selected question object (Col. 6, lines 40-44).

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2, 4-6, 9, 11-13, 16 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sebastian (US 5,822,206)** in view of **Thackston (US 6,295,513)**.

**Sebastian** discloses the limitations of claims 1, 8 and 15 above but fails to specifically disclose the limitations of claims 2, 4-6, 9, 11-13, 16 and 18-19. However, **Thackston** discloses such limitations as follows:

As for claims 2, 4-6, 9, 11-13, 16 and 18-19, Thackston discloses:

 each of said question object, said answer object, and said decision object is stored in a tool-neutral persistent form (Col. 5, lines 47-51);

- said question interface captures an association of said question object with a decision object (Fig. 19B, element 1926, 1936 or Fig. 23, elements 4320 and 4360);
- said answer interface captures an association of said answer object with a question object (Fig. 23, element 4320, 4360);
- said decision interface captures an association of said decision object with an answer object (Fig. 19B, output of element 1928 is associated with decision element 1936);
- said answer interface captures an association of said answer object with a question object (Fig. 23, element 4320, 4360, query and result).

Therefore, it would have been obvious to a person of the ordinary skill in the art at the time the invention was made to combine the teachings of **Sebastian** with **Thackston** because it would provide an improved system that maintains engineering data, such as design documents and three dimensional model data, in a common, neutral format, which is accessible by authorized team members through a graphical user interface (**Thackston**, Col. 3, line 64 – Col. 4, lines 4)

5. Claims 3, 10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sebastian and Thackston** in view of **Twigg (US 2002/0012007 A1)**.

Sebastian and Thackston discloses the limitations of claims 1-2, 8-9 and 15-16 and further Thackston discloses the use of separate relational database (Col. 6, lines 50-53). Sebastian and Thackston fail to specifically disclose, regarding claims 3, 10

and 17, wherein associations between each of said question object, said answer object, and said decision object are captured using foreign keys. However, **Twigg** discloses an internet based design/drafting system wherein associations between description data, note data and cost data regarding a design take place (Page 3, 0038, lines 13-24 and lines 32-35, "one or more data fields 36, 46 of each design file 22 can be related to the overall design; Fig. 3, foreign keys correspond to Class #, Description, Note, Cost). Therefore, it would have been obvious to a person of the ordinary skill in the art at the time the invention was made to combine the teachings of **Sebastian and Thackston** with **Twigg** because it would provide an improved system wherein relationships of a class object are related using foreign keys or a common column such as shown in Fig. 3, Class #, 32-1, 32-2, 32-X; Description 34-1, 34-2, 34-x), in order to communicate ideas regarding a design and/ or features of a design (**Twigg**, Page 1, 0005, lines 1-3).

#### Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning communication or earlier communication from the examiner should be directed to Zoila Cabrera, whose telephone number is (703) 306-4768. The examiner can normally be reached on M-F from 8:00 a.m. to 5:30 p.m. EST (every other Friday).

If attempts to reach the examiner by phone fail, the examiner's supervisor, Leo Picard, can be reached on (703) 308-0538. Additionally, the fax phones for Art Unit

Art Unit: 2125

2125 are (703) 872-9306. Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist at (703) 305-9600.

Zoila Cabrera Patent Examiner 2/7/05